

RUNNING HEAD: What does the research say about SWDs & service learning?

What does the research say about students with disabilities and service learning?¹

By

Delsue Frankson, Exceptional Student Education Teacher, Palm Beach Central High &
Doctoral Student in the Urban SEALS (Special Education Academic Leaders) Program

&

Ann Nevin, Ph. D., Professor Emerita Arizona State University, Visiting Professor,
Department of Educational & Psychological Studies, &
Co-PI Urban SEALS (Special Education Academic Leaders)
Florida International University
Miami, FL 33199

Paper accepted for presentation (Proposal #165421)
2007 Annual Conference of American Educational Research Association
SIG: Service Learning & Experiential Education

Abstract

The purpose of this paper is to summarize the research on service learning pedagogy into the realm of professional practice for students with disabilities. At this point in the development of a research base for service learning, an emerging need for studies is reported. Limited research exists which studies the impact of service learning activities with respect to the retention of students with disabilities, particularly those who are also African American. The authors suggest that one role that university faculty can take is to create, implement, and evaluate service-learning programs in urban communities that incorporate students, adults with disabilities, the local public school k-12, and teacher educators and researchers from nearby colleges and universities.

¹ Note: The authors appreciate the support and encouragement provided by Dr. Elizabeth Cramer, professor in the Urban SEALS program, and Adis Beesting, Green Library Education Research Librarian, at Florida International University. We'd like to express our gratitude for the nurturative critical feedback and comments from the anonymous reviewers of the proposal which enhanced the final construction of the paper. The research review reported in this paper was funded in part through FIU's Urban SEALS project which is a grant award in personnel preparation (CFDA 84.325D) from the US Department of Education, Office of Special Education and Rehabilitative Services; the results should not be construed as representing UDOE or OSERS policy.

Service learning is a teaching and learning interaction that has gained a practice and research base. As defined in the National and Community Service Trust Act of 1993, the intent of the service learning is to meet community needs and to provide students with direct experience to plan, achieve, and reflect on their learning. Service learning has also been described as a teaching method that “involves students performing community service in order to learn knowledge and skills connected to curricular objectives” (Billig, 2002, p. 184), K-12 schools and districts have adopted service learning as an educational reform strategy to help students achieve their educational goals. For example, according to NCES data analyzed by Kleiner and Chapman (1999), more than one third of all public schools in the United States and about half of all public high schools reported the use of service learning pedagogy. Service learning is positioned to serve as an example of an educational strategy that influences many aspects of student growth and accomplishment, such as the students’ ability to transfer tasks and their acquisition of important personal dispositions such as effort and resilience, qualities of successful life in and out of school, and civic responsibility (ABT Associates, 1999; Cofer, 1996; DeZure, 2002; Kleiner & Chapman, 1999; Furco & Billig, 2002; Troppe, 1995) One well established goal of service learning is to improve citizenship education and civic responsibility (ASLER, 1993; Gomez, 1999; Kelleher & Farley, 2006; Madsen & Turnbull, 2005; Scales et al., 2000). This means that service learning can be a way that K-university educators might provide their students with a world of quality experiences (Hale & Brascia, 2006; Karayan & Gathercoal, 2003; Kelleher & Farley, 2006; Madsen & Turnbull, 2005; Reardon, 1998; Wade, Anderson, Yarbrough, Pickeral, Erickson, & Kromer, 1999; Zlotkowski, 1998).

Traditionally, service-learning projects have been framed within a one-way paradigm where the student provides service and, based on written reflections, the student indicates s/he has achieved educational objectives. Among others, Pritchard (2002) argued that service learning projects should recognize the relationship between service learning activities and standards based reform. As mandated by the No Child Left Behind Act of 2001 and the Individuals with Disabilities Education Improvement Act (reauthorized in 2004), one major reform that educators face in the 21st century is to provide access to general education instruction, curriculum, and pedagogy for students with disabilities (SWDs).

Such mandates are especially problematic for schools with SWDs from ethnically and culturally linguistically diverse (CLD) heritages who have been heretofore over-represented in special education classes and/or under-represented in classes for the gifted (Civil Rights Project, 2002; Obiakor & Ford, 2002). Traditionally, service learning projects have included SWDs as recipients of service learning from their peers without disabilities, with benefits accruing to them as well as the providers (Burns Story, & Certo, 1999; Copeland, Hughes, Carter, Guth, Presley, Williams, & Fowler, 2004; Dolyniuk, Kamens, Corman, DiNardo, Totaro, & Rockoff, 2002; Karayan & Gathercoal, 2003; Smith, 2003).

The purpose of this paper is to report the results of a meta analysis of the literature with an emphasis on service learning pedagogy for students with disabilities from CLD heritages. The authors were interested in identifying exemplars of service learning projects which reported the impact of service learning when SWDs from black and CLD heritages were the providers of the service learning rather than recipients.

Method

The review of the literature followed accepted methods for searching several data bases (Gall, Gall, & Borg, 2005).

Data Sources/Search Techniques

From the list of articles after a search of the ERIC data bases for articles published between 1999-2006 with keywords such as *service learning, students with disabilities, high school, research studies, achievement impact*, the authors traced further studies by footnote tracking. For this paper, the authors selected only those studies that represent empirical research. In response to the concern that the meta-analysis as reported in the preliminary proposal of this paper was too brief, the authors updated the search using the same key words as the search conducted in Fall 2006 to find other studies as well as to confirm that earlier search. Then, a new search with FIU's Education Research Librarian (Adis Beesting) was conducted using an expanded data base and new search engines. This yielded an additional number of studies (published from through February 2007).

Data Analysis

The resulting master list of studies that were included in this meta-analysis were categorized by research design genres as shown in Table 1. The studies were then

Insert Table 1 – Research Design Genres for SL Research-- About Here

critiqued with a specific focus on impact of service learning with respect to the inclusion of students with disabilities as service learning providers.

Results

The results of the literature search are reported in the following sections: Types of Journals, Types of Research Designs, Theoretical Frameworks, Critiques of Representative Studies from Each Design Genre, and Synthesis.

Types of Journals. The studies were featured in research-oriented journals, (*Academic Exchange Quarterly, Phi Delta Kappan, and The Journal of Experiential Education.* and practitioner-oriented journals (e.g., *Education and Training in Mental Retardation and Developmental Disabilities, Intervention in School and Clinic, Michigan Journal of Community Service Learning, New Directions for Teaching and Learning, Teaching and Teacher Education*).

Types of Research Design. A variety of research designs were found, with quantitative designs appearing the most frequently. Two mixed methods studies (QUAN-QUAL and QUAL-QUAN), five quantitative studies were reported (two correlational, one longitudinal, and 2 survey). There were four descriptive studies, five qualitative case studies, one critique (from a disabilities studies perspective), and one brief review of the historical and theoretical antecedents of service learning. One researcher team embedded single subject research designs within their mixed method quantitative-qualitative design.

Theoretical Frameworks. Several theoretical frameworks were reported in the literature. Service learning pedagogy was framed within a participatory action research framework (Reardon, 1998) in the context of a “new social science paradigm and methodology for social change” (p. 58). PAR was distinguished from other research paradigms by its emphasis on the political aspects of knowledge production (Reason, 1998, p. 269) as well as its double objective: produce knowledge and action directly useful to a group of people, *and* simultaneously empower people through the process of constructing and using their own knowledge. In their study of service-learning projects of teacher education students who worked with students with disabilities, Karayan and Gathercoal described this phenomenon as the reciprocal empowerment model which simultaneously promotes students with disabilities as service learning providers as well as service learning recipients.

Critiques of a Representative Study from Each Genre

In this section, a representative study from each genre is summarized and critiqued.

Opinion of Expert Example. Garecka and Gent (2001) critiqued service learning from the perspective that service learning in general is a disservice to people with disabilities. They use an inquiry rhetorical process to critique service learning from the disabilities studies perspective. Typical service learning programs emphasize an essentially dehumanizing one-way model of ‘helping others less fortunate’ than oneself. Garecka and Gent recommend service learning implementation be restructuring so that service learning is *provided by* students with disabilities so they can experience the benefits of providing service as well as the respect, admiration, and valuing for the changes in those to whom they provide the service.

Descriptive Research Design. There were several examples of descriptive studies: Abernathy and Obenchain (2001), Cofer (1996), Dolyniuk, Kamens, Corman, DiNardo, Totaro, and Rockoff (2002), Frankson (2005), Jennings.(2001), and Scales, Blyth, and Kielsmeier (2000) In her descriptive pre-post study of the impact of service-learning on student attitudes, grades, and attendance in science and math classes attended by freshmen and sophomores, Cofer (1996) used Likert scales to evaluate the service learning projects, scores on the Semantic Differential Test, grades, and attendance records. Overall, grades and attendance did not improve but attitudes towards a social issue or a particular group of people were positively influenced.

Quantitative Correlational Research Design. Scales, Blyth, and Kielsmeyer (2000) and Scales, Roehlkepartain, Neal, Kielsmeir, and Benson (2006) used correlational designs. Scales et al. (2000) studied middle school students by comparing their levels of social responsibility and academic success as measured by grades. The more recent study by Scales, Roehlkepartain, et al. (2006) studied the role of community service and service learning in reducing academic achievement gaps. Data from three diverse data sets on 6th-12th grade students’ academic success, SES, and principal evaluations of attendance, engagement and achievement. Higher ratings of academic success, grades, and attendance were positively correlated with higher levels of participation in service learning activities. In particular, when the data were

disaggregated for students in high poverty, urban and majority non-white schools, where those students with service learning participation scored better on academic success variables compared to their low-SES peers with less or no service learning participation. The researchers hypothesize that principals find service learning attractive because it can reduce the achievement gap between students from high and low SES neighborhoods.

However, the usual caveats with respect to lack of causality for correlational research apply to these studies. Although the researchers can be commended in conducting research on the impact of service learning for middle school students, there can be no assurance that the service learning itself was the causal factor in the concurrent increase in academic success or social responsibility.

Quantitative Program Evaluation Designs. Burns, Storey, and Certo (1999) reported the effect of service learning on attitudes towards students with severe disabilities. The researchers compared and contrasted the impact of service learning projects that included students with disabilities (SWD): one where the SWD contributed to the project, one where the SWD received the service learning, and one where equal participation was structured (i.e., reciprocity). The researchers found that greater and more positive attitudinal effects occurred for high school students without disabilities when the equal participation was structured. These results resonate with Karayan & Gathercoal (2003).

Single Subject Design. As part of a qualitative-quantitative mixed methods design, Karayan and Gathercoal (2003) reported a single subject analysis of the impact of service learning as an example of how including SWDs with disabilities as service providers creates a reciprocal empowerment experience for both provider and recipient of service learning experiences and the results of applying the rubric to evaluate student teacher service learning projects within an AB repeated measures design.

Mixed Methods Quantitative Qualitative Designs. Three studies were categorized as mixed methods (Karayan & Gathercoal, 2003; Shastri, 2001; and Wade et. al., 1999). Utilizing a sequential quantitative-qualitative design, Shastri (2001) conducted a t-test for independent samples on total scores earned on quizzes, exams, and written assignments to measure academic outcomes. Because the variance of the two groups was the same, a pool t-test was used. A Mann-Whitney test was used to analyze the results of the affective outcomes. Although the results for the academic outcomes were not statistically significant (at the $p \leq .05$ level), the means of the two groups indicated that the service learning group was 10 points higher than the control group. Shastri believed that this indicated that students who participated in service learning were doing better on written assignments. Civic responsibilities were found to be statistically significant for students who completed service learning projects.

A sequential qualitative-quantitative design is represented by Gathercoal and Karayan (2003) who described the infusion of service-learning pedagogy within the teacher education programs of a California university. In the past, students with special needs have generally been viewed as recipients and beneficiaries of service-learning projects. These researchers referred to this phenomenon as responding to students' deficits or needs (the deficit model) which the general public perceives as compassion for

the less fortunate. The preservice teacher service-learning projects studied in their research illustrated a shift from the deficit to the empowerment model and even the reciprocal empowerment model. This paradigm shift occurred as preservice teachers became competent to more closely align their service-learning projects to the ASLER (1993) elements for high quality service-learning. As a result, the researchers found that many of the service-learning projects were recognized and valued because they utilized stakeholders' individual strengths, especially as the preservice teachers learned by serving and served by learning.

Qualitative Design. There were four researchers who reported case study designs (Hale & Brascia, 2006; Madsen & Turnbull, 2005; Reardon, 1998, Smith, 2003). In their case study of teaching citizenship through service-learning published in *Academic Exchange Quarterly*, Madsen and Turnbull (2005) interview college students in business management over a two year period. The partnership between an assistant professor of management and a pedagogical researcher showed the impact of service learning on citizenship engagement and citizenship perceptions/experiences of students who conducted service learning projects as part of their assignments for a business management course. As an example of the nature of the attitudinal changes that were found is described by a young man who observed an employee facilitating activities for disabled adults: *"I am one...who will be very nice and cordial to individuals that are mentally challenged, but I am glad when our interaction is over. But this project has already begun to change that, especially after Tues night when I (interacted) with them (and broke down) some of the barriers that my mind had created out of ignorance"* (Madsen & Turnbull, 2005, p. 5).

A school wide descriptive case study example of the integration of the conceptual frameworks of service learning pedagogy and participatory action research set the context for raising different questions and seeing different avenues to explore with regards to educating students with disabilities (Frankson, 2005). Frankson (2005) conducted an informal school-wide survey to determine how students with disabilities are involved with service-learning projects at her high school in a large suburban area located in the southeastern part of the USA. The 9-12 high school enrolled 2, 424 students (53% white, 26% Hispanic, 15% Black, 3% multiracial, 3% Asian-Pacific islander, and <1% American Indian/Alaskan Native) (http://www.greatschools.net/modperl/browse_school/fl/5372). About 11% of the students were classified as students with disabilities, 2% as gifted, and 7% as limited English proficient. The National Honor Society sponsored a peer tutoring program where peers who were having difficulty in various subject areas were tutored several times a week. The tutors were awarded volunteer hours towards graduation, received positive verbal feedback from their sponsor, and reported they gained a sense of pride in assisting their peers. Students with moderate mental retardation participated in providing cafeteria service as part of a learning contract to explore various employment opportunities. They received guided instruction, feedback, and credit towards coursework as part of their instructional program. Although both these programs can be considered service learning examples, what is missing in the evaluation schema is the evaluation of the service on those who received the service (not just those who delivered it).

During the 2006-2007 academic year, the teachers in the special education and culinary arts department collaborated on a project that encouraged students with and without disabilities to work on a service learning project (Frankson, Forbes-Edwards, & Berman, 2007). The students with disabilities prepared two garden beds, planted, cared for, and harvested herbs and vegetables to deliver to the students in the culinary arts department who were learning to plan, prepare, and deliver menus for the once a month meal offered through the cafeteria for the faculty. Preliminary evaluations indicate that both projects were successful and that students in both departments benefited. For example, one student wrote about what he had learned as a result of the garden project, using inventive spelling, *“Thut you have responceabilitys”*[sic]. The special educator remarked on a unique unexpected outcome of the garden project. *“Students experimented and reported on their findings. For example, they noticed some of the leafy greens had holes indicating that bugs had infested the garden. The students created an organic pesticide for their plants (bug spray juice). After the students’ observed the plants with the organic pesticide treatment for a week, they came to a conclusion that their experiment worked!”* Overall, the teachers from both departments, the students, and the administration were encouraged by the results of the project and intend to carry it on for the next semester’s growing cycle.

Synthesis of the Selected Studies

An increasing number of studies support the use of service learning as a pedagogy (e.g., Gomez, 1999; Wade et al., 1999) as well as the use of participatory action research models to analyze the impact of service learning (Gathercoal & Karayan, 2003; Reardon, 1998) and the emergence of a new theoretical stance of reciprocal empowerment (also embraced by disabilities studies proponents). However, what emerged is a limited number of studies where students with disabilities are active participants in the delivery of service learning projects² (rather than the recipients of the service itself).

Not many researchers have studied programs where delivery of service learning included SWDs from CLD heritages, particularly African American and Black heritages. One study of SWDs in the service learning provider role serves as an exemplar. As reported by Jennings (2001), students with behavioral or learning disabilities at a New Jersey middle school *“gained confidence in their skills and developed a sense of pride and community belonging”* (p. 474). The service learning projects developed by the SWDs involved reading to elementary students and interviewing senior citizens.

Discussion

In this section, the implications and educational significance of the critique of the literature on service learning are discussed. Then, based on the synthesis of the existing research, the authors pose possible actions to be taken by stakeholders (teachers,

² Note: new research where SWDs are included as service providers is emerging every day. We are especially interested in the paper presented by Adelle Renzaglia & Stacy Dymond titled, *An evaluation of the importance and use of the elements of effective high school service learning programs that include students with disabilities* presented in this session. In addition, we are interested the study of service learning when delivered within a culturally responsive pedagogy reported by Ayesha Imani in her paper entitled *From SBA to HEKA: An examination of community service-learning practices in three African-Centered schools*, also presented in this session.

community agencies, and researchers) so as to enhance the roles of students with disabilities as service-learning deliverers.

The issue of funding service learning pedagogy must be addressed. The National and Community Service Act of 1993 created and funded the Corporation for National Service, which supports service learning through *Learn and Serve America* (formally called *Serve America* under the National and Community Service Act of 1990). *Learn and Serve America* is a competitive grants program for establishing elementary, secondary, postsecondary, and community-based service projects. The Improving America's Schools Act of 1994 and private foundations are other ways that service learning can be funded.

There are two compelling reasons why service learning should be conscientiously and consciously structured to include SWDs from black and CLD heritages as service learning providers. First, including SWDs as service learning providers meets the emerging demand by people with disabilities for full integration in the workplace and civic life, access to community services, and, as Horton (1995) eloquently wrote, "*By far, the more fundamental reforms have to do with changing the status of persons with disabilities from outcasts to full citizens. This status change is reflected in terms such as self-determination, empowerment, and leadership*" (p. 16). Second but perhaps more important, emerging data shows significantly greater effects of service learning on academic performance among nonwhite and educationally disadvantaged participants (e.g., ABT Associates, 1999; Kleiner & Chapman, 2000). 221

The authors agree with many researchers and practitioners who have described procedures for university personnel who create, implement, and evaluate service learning programs in urban communities that incorporate students, individuals with disabilities, the local public school k-12, and teacher educators and researchers from nearby colleges and universities (e.g., Berman, Baily, Collins, Kinsley, & Holman, 2000).

Insert Table 2 – Actions for Stakeholders -- about here

The actions for various stakeholders, summarized in Table 2, are categorized according to actions for K-higher education teachers, community agency personnel and school administrators, and students with disabilities.

We conclude this paper with a caveat and a call to action. We are keenly aware of the constantly burgeoning literature on service learning in k-12 environments as well as the increased attention to university-wide programs where service learning is consciously studied and taught in a variety of disciplines (business, psychology, education, social work, nurse education, and so on). Moreover, service learning is finding its way into faculty development in higher education environments (e.g., Hale & Brascia, 2006; Karayan & Gathercoal, 2003; Kelleher & Farley, 2006; Madsen & Turnbull, 2005; Reardon, 1998; Wade et al., 1999; Zlotkowski, 1998). In addition, the shifting sands of published research remind us that literature reviews can be outdated very quickly (as witnessed by the new items that surfaced in the revised search procedures reported in this study). Therefore, the major caution in interpreting the results of our synthesis is to request that others replicate and extend these finding perhaps by conducting, for example, a critical meta analysis of the emergent research from higher education environments.

Our call to action derives from a message from Jean Piaget who wrote that “*schooling isn’t worth anything unless it creates for people the capacity to believe that when they leave school, they can change the world ... [but] when students finish school, [and] they believe that they cannot change the world, then our education was not powerful enough*” (n.d.). We agree that a valued outcome of service learning for all our students is that they *know* they can change their worlds and the worlds of others, after they complete their service learning projects, *especially* those where they experience reciprocal empowerment. Overall, systematic studies that document the paradigm shift of including SWDs as active partners in the design, delivery, and evaluation of service learning projects rather than recipients may lead to significant contributions that advance the educational achievement and psychological well-being of the students.

We suspect that our readers agree that service learning continues to be an important pedagogy to explore as well as a vital life’s skill, especially when we recall Albert Schweitzer’s famous advice: “*I don’t know what your destiny will be, but one thing I know: the only ones among you who will be really happy are those who will have sought and found how to serve.*” At this point in the development of a research base for service learning with SWDs as active partners, we hope our readers agree that there is a need for a systematic program of research to analyze the impact of service learning activities on variables such as the lived experiences, quality of life, and retention of students with disabilities, particularly those who are also African American. Therefore, our call to action is directed to the members of the Special Interest Group for Service Learning and Experiential Education. As a community of scholars, the Special Interest Group for Service Learning and Experiential Education might be in a perfect position to serve as a focal point for the advancement of this line of research nationwide.

References

- Abernethy, T., & Obenshain, K. (2001). Student ownership of service-learning projects: Including ourselves in our community. *Intervention in School and Clinic*, 37(2), 86-95.
- ABT Associates. (1999). National evaluation of *Learn and Serve America*. ED 437574.
- Alliance for Service-Learning in Education Reform (ASLER). (1993). *Standards of quality for school-based service-learning*. Chester: VT: Author.
- Berman, S., Baily, S., Collins, R., Kinsley, D., & Holman, E. (2000). Service-learning: An administrator’s tool for improving schools and connecting with the community. Denver, CO: *Education Commission of the States*.
- Billig, S. (2002). Support for K-12 service learning practice: A brief review of the research. *Educational Horizons*, 80(4), 184-189.
- Burns, M., Storey, K., & Certo, N. (1999). Effect of service learning on attitudes towards students with severe disabilities. *Education and Training in Mental Retardation and Developmental Disabilities*, 34(1), 58-65.
- Civil Rights Project. (2002). Racial Inequity in Special Education: An Executive Summary for Federal Policy Makers. Cambridge, MA: Harvard University, The

- Rights Project. Retrieved March 19, 2007 from
http://www.civilrightsproject.harvard.edu/research/specialed/IDEA_paper02.php
- Cofer, J. (1996). Service learning: Does it affect attitudes, grades, and attendance of students who participate? Report of an action research project in Franklin County Schools, Frankfort, KY. ERIC Document 431687.
- Copeland, S., Hughes, C., Carter, E., Guth, C., Presley, J., Williams, C., & Fowler, S. (2004). Increasing access to general education: Perspectives of participants in a high school peer support program. *Remedial and Special Education*, 25(6), 342-352.
- DeZure, D. (2002). Essay review. Assessing service-learning and civic engagement: Principles and techniques. *Michigan Journal of Community Service Learning*, 8(2) 75-78.
- Dolyniuk, C., Kamens, M., Corman, H., DiNardo, P., Totaro, R., & Rockoff, J. (2002). Students with developmental disabilities go to college: Description of a collaborative transition project on a regular college campus. *Focus on Autism and Other Developmental Disabilities*, 17(4), 236-24
- Frankson, D. (2005). *Service Learning Projects at SuperHigh School*. Submitted in partial fulfillment of requirements for an independent study supervised by Professor A. Nevin. Miami, FL: Florida International University, College of Education, Urban SEALS (Special Education Academic Leaders).
- Frankson, D., Forbes-Edwards, S., & Berman. (2007, April). *Report of Herb & Vegetable Garden Project, 2006-2007*. Palm Beach, FL: Palm Beach Central High School, Departments of Exceptional Student Education & Culinary Arts.
- Furco, A., & Billig, S. (2002). *Service learning: The essence of the pedagogy--Advances in Service learning research*. Greenwich, CT: Information Age Publishing, 80 Mason Street, P.O. Box 4967, Greenwich, CT 06830. ERIC Document #462631.
- Gall, J. P., Gall, M.D., & Borg, W. R. (2005). *Applying educational research: A practical guide* (5th ed.). Boston, MA: Pearson Education Inc.
- Gomez, B. (1999). Service learning: Every child a citizen. Denver, CO: *Education Commission of the States*.
- Gurecka, L., & Gent, P. (2001). Service learning: A disservice to people with disabilities? *Michigan Journal of community Service Learning*, 8(1), 36-43.
- Hale, A., & Brascia, K. (2006, April). Faculty empowerment through refined service learning: An evaluation of a faculty development seminar on service-learning pedagogy, theory, and methodology. Paper presented at American Educational Research Association, San Francisco.
- Kelleher, J., & Farley, M. (2006, April). Engaged pedagogies: Service learning perceptions from the field. Paper presented at annual conference of the American Educational Research Association, San Francisco.

Horton, B. (1995). Culturally diverse leadership: A model of inclusion. In Abery, B. (Eds.) *Feature issue on leadership by persons with disabilities*. Minneapolis, MN: University of Minnesota, Research and Training Center on Residential Services and Community Living. Available from Institute on Community Integration, University of Minnesota, 150 Pillsbury Drive, SE., Minneapolis, MN 55455. ERIC Document #ED 386875.

Individuals with Disabilities Education Improvement Act (IDEIA) of 1990, 20 United States Congress 1412[a] [5]), Reauthorized 1997; 2004.

Jennings, M. (2001). Two very special service-learning projects. *Phi Delta Kappan*, 9(4), 474-475.

Karayan, S., & Gathercoal, P. (2003). Service learning: Empowering students with special needs. *Academic Exchange Quarterly*, 7(2), 151-157

Kleiner, B., & Chapman, C. (1999). Service-learning and community service in K-12 public schools. *The National Center for Education Statistics (NCES) of the U.S. Department of Education*. Retrieved 3/15/07:
http://nces.ed.gov/programs/quarterly/vol_2/2_1/q4-2.asp

Madsen, S., R., & Turnbull, O. (2005). Teaching citizenship through service-learning. *Academic Exchange Quarterly*, 9(1), 1-8.

No Child Left Behind. (NCLB). (2001). HB1. Retrieved March 19, 2007 from
<http://www.ed.gov/policy/elsec/leg/esea02/beginning.html#sec1>

Obiakor, F., & Ford, B. (Eds). *Creating successful learning environments for African American learners with exceptionalities*. Thousand Oaks, CA: Corwin Press.

Pritchard, I. (2002). Community service and service-learning in America: The state of the art. In A. Furco and S. H. Billig (Eds.) *Service-learning: The essence of the pedagogy*. Connecticut: Information Age Publishing.

Reardon, K. (1998). Participatory action research as service learning. *New Directions for Teaching and Learning*, 73, 57-64.

Reason, P. (1998). Three approaches to participative inquiry. In N. Denzin & Y. Lincoln (Ed.). *Strategies for qualitative research* (pp. 261-291). Thousand Oaks. CA: Sage.

Scales, P., Blyth, B., & Kielsmeier (2000). The effects of service-learning on middle school students' social responsibility and academic success. *Journal of Early Adolescence*, 20:(3), 331-358.

Scales, P., Roehlkepartain, E., Neal, M., Kielsmeir, J., & Benson, P. (2006). Reducing academic achievement gaps: The role of community service and service learning. *Journal of Experiential Education*, 29(1), 38-60.

Shastri, A. (2001, March). Examining the impact of service learning among preservice teachers. Paper presented at annual conference of the American Association of Colleges of Teacher Education, Dallas, TX. ERIC #ED 453241.

- Smith, V. (2003). "You have to learn who comes with the disability": Students' reflections on service learning experiences with peers labeled with disabilities. *Research and Practice for Persons with Severe Disabilities*, 28(2), 79-90.
- Troppe, M. (Ed.). (1995). Forward. In M. Troppe (Ed). *Connecting cognition and action: Evaluation of student performance in service learning courses* (pp. 1-4). Providence, RI: Campus Compact.
- Wade, R.C., Anderson, J.B., Yarbrough, D.B., Pickeral, T., Erickson, J. B., & Kromer, T. (1999). Novice teachers' experiences of community service-learning. *Teaching and Teacher Education*, 15, 667-684.
- Zlotkowski, E. (Ed.). (1998). *Successful service learning programs: New models of excellence in higher education*. Bolton, MA: Anker Publishing Company, Inc.

Table 1. Research Designs Utilized to Evaluate Service Learning

DESCRIPTIVE STUDIES: N = 5 Abernathy & Obenchain (2001) Dolyniuk, Kamens, Corman, DiNardo, Totaro, & Rockoff (2002) Frankson (2005) Jennings (2001) Scales, Blyth, & Kielsmeier (2000)	QUANTITATIVE METHODS N=5 • SURVEY N=2 ABT Associates. (1999); and Kleiner & Chapman (1999) • CORRELATIONAL N=2 Scales, Roehlkepartain, Neal, Kielsmeir, & Benson(2006); and Scales, Blyth, & Kielsmeir (2000) • PROGRAM EVALUATION N=1 Burns, Storey, & Certo (1999)
QUALITATIVE --CASE STUDY APPROACH: N=4 Hale & Brascia (2006) Madsen & Turnbull (2005) Reardon (1998) Smith (2003)	MIXED METHODS: QUAN QUAL N=3 Karayan & Gathercoal (2003) Shastri (2001) Wade, Anderson, Yarbrough, Pickeral, Erickson, & Kromer (1999)
HISTORICAL (included in ABT Associates, 1999) Billig (2002)	SINGLE SUBJECT DESIGN Reported as an example of reciprocal empowerment with SWDs as service providers as well as recipients in Karayan & Gathercoal (2003)
EXPERT OPINION----CRITIQUE N=1 Gurecka & Gent (2001)	

Table 2 Actions for Teachers, Actions for Community Agencies, and Actions for
Students with Disabilities.

Actions	Recommendations
Teachers (K- University Settings)	1. Teachers choose meaningful projects that students can learn from and appreciate for life-time and that can benefit the community. 2. Teachers use rationales to when teaching students the importance of service learning. 3. Teachers reflect on current service learning experience, and decide what can be done to improve their next service learning experience.
Community Agencies	1. Community agencies allow students and teachers to participate in meaningful projects to improve the community. 2. Agencies provide funding that is set aside specifically to fund service learning projects. 3. Host periodic events to promote and celebrate service learning (e.g., Service Learning Day).
Students with Disabilities & Advocates	1. Assign students without disabilities and students with disabilities to work as co-equal partners when implementing their service learning projects so that SWD can be supported (but not over-supported) by peers. 2. Assign older students with disabilities assist younger students without disabilities as coaches or partners in implementing service learning projects. 3. Let students with disabilities choose community service learning projects they want to work on.